

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. The following listing provides the amended claims with deleted material crossed out and new material underlined to show the changes made.

Claims 1-17 (Canceled)

18. (Currently Amended) A fuel for feeding spark ignition engines, in particular those fitted in aircraft, having an F4 octane number at least equal to 130 and a reduced level of aromatic compounds, said fuel containing substantial quantities of a first hydrocarbons base (B1) essentially constituted by isoparaffins comprising 6 to 9 carbon atoms, wherein a level of isooctanes in the isoparaffinic hydrocarbons cut (B1) is greater than 70% by mass, and a second hydrocarbons base (B2) also constituted by isoparaffins comprising 4 or 5 carbon atoms and, optionally, by other hydrocarbons and additives customary for this type of fuel, in a quantity and quality sufficient for the fuel to comply with the specifications in force, wherein ~~[[it]]~~ the fuel contains at least 5.0% by volume~~[[,]]~~ ~~and preferably at least 10.0% by volume[[,]]~~ of a hydrocarbons base (B3) essentially composed of cycloparaffins comprising 6 to 8 carbon atoms, and in that the ratio R of the quantities by volume (B1+B2)/B3 is greater than 2.0.

19. (Previously Presented) A fuel according to claim 18, wherein the ratio R of the quantities by volume (B1+B2)/B3 is comprised between 2.3 and 19.0.

20. (Previously Presented) A fuel according to claim 18, wherein the ratio K of the quantities by volume B1/B2 is greater than 2.0.

21. (Previously Presented) A fuel according to claim 19, wherein the ratio K of the quantities by volume B1/B2 is greater than 2.0.

22. (Previously Presented) A fuel according to claim 20, wherein the ratio K of the quantities by volume B1/B2 is comprised between 2.3 and 10.6.

23. (Previously Presented) A fuel according to claim 21, wherein the ratio K of the quantities by volume B1/B2 is comprised between 2.3 and 10.6.

24. (Previously Presented) A fuel according to claim 18, wherein the cycloparaffinic hydrocarbons cut (B3) is essentially constituted by cyclohexanes.

25. (Canceled)

26. (Currently Amended) A fuel according to claim 24, wherein the level of cyclohexanes in the cycloparaffinic hydrocarbons cut (B3) is greater than 80% ~~and preferably greater than 90%~~ by mass.

27. (Previously Presented) A fuel according to claim 18, wherein the first isoparaffinic hydrocarbons cut (B1) is essentially constituted by isoparaffins with eight carbon atoms.

28. (Previously Presented) A fuel according to claim 27, wherein the level of the isoparaffinic hydrocarbons cut (B1) with eight carbon atoms is greater than 40% by volume.

29. (Previously Presented) A fuel according to claim 28, wherein the level of the isoparaffinic hydrocarbons cut (B1) with eight carbon atoms is greater than 43% by volume.

30. (Previously Presented) A fuel according to claim 27, wherein the isoparaffinic hydrocarbons containing eight carbon atoms are isooctanes.

31. (Previously Presented) A fuel according to claim 28, wherein the isoparaffinic hydrocarbons containing eight carbon atoms are isooctanes.

32. (Previously Presented) A fuel according to claim 29, wherein the isoparaffinic hydrocarbons containing eight carbon atoms are isooctanes.

33. (Previously Presented) A fuel according to claim 27, wherein the level of isooctanes in the isoparaffinic hydrocarbons cut (B1) with eight carbon atoms is greater than 70% by mass.

34. (Previously Presented) A fuel according to claim 33, wherein the level of isooctanes in the isoparaflinic hydrocarbons cut (B1) with eight carbon atoms is greater than 75% by mass.

35. (Previously Presented) A fuel according to claim 18, wherein the second isoparaflinic hydrocarbons cut (B2) is essentially constituted by isoparaflins with five carbon atoms.

36. (Previously Presented) A fuel according to claim 19, wherein the second isoparaflinic hydrocarbons cut (B2) is essentially constituted by isoparaflins with five carbon atoms.

37. (Previously Presented) A fuel according to claim 20, wherein the second isoparaflinic hydrocarbons cut (B2) is essentially constituted by isoparaflins with five carbon atoms.

38. (Previously Presented) A fuel according to claim 35, wherein the isoparaflinic hydrocarbons containing five carbon atoms are isopentanes.

39. (Previously Presented) A fuel according to claim 38, wherein the level of isopentanes in the isoparaflinic hydrocarbons cut (B2) with five carbon atoms is greater than 85% by mass.

40. (Previously Presented) A fuel according to claim 39, wherein the level of isopentanes in the isoparaflinic hydrocarbons cut (B2) with five carbon atoms is greater than 90% by mass.

41. (Previously Presented) A fuel according to claim 35, wherein the isoparaflinic hydrocarbons cut containing 5 carbon atoms is replaced by a cut constituted by hydrocarbons containing 4 carbon atoms.

42. (Currently Amended) A fuel according to claim 18, wherein its level of aromatic compounds is less than 10%: by volume ~~and preferably less than 5% by volume.~~

43. (Previously Presented) A fuel according to claim 18, wherein its benzene content is less than 0.2% by volume.

44. (Previously Presented) A fuel according to claim 43, wherein its benzene content is less than 0.1% by volume.

45. (Previously Presented) A fuel according to claim 42, wherein its benzene content is less than 0.2% by volume.

46. (Previously Presented) A fuel according to claim 45, wherein its benzene content is less than 0.1 % by volume.

47. (Previously Presented) Use of the fuel according to claim 18, to feed, alone or in mixture, spark ignition engines of aircraft.

48. (Previously Presented) Use of the fuel according to claim 18, to feed, alone or in mixture, spark ignition engines of competition or similar vehicles.

49. (Previously Presented) Use of the fuel according to claim 18 to feed, alone or in mixture, a fuel treatment unit, such as a reformer, coupled to a fuel cell.

50. (New) A fuel according to claim 18, wherein said fuel contains at least 10.0% by volume, of said hydrocarbons base (B3) essentially composed of cycloparaffins comprising 6 to 8 carbon atoms.

51. (New) A fuel according to claim 24, wherein the level of cyclohexanes in the cycloparaffinic hydrocarbons cut (B3) is greater than 90% by mass.

52. (New) A fuel according to claim 18, wherein the fuel's level of aromatic compounds is less than 5%: by volume.